Editorial

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This special issue aims at publishing the empirical studies related to mobile learning application and strategies in diversified settings and contexts. The advancement of personal computing devices, from personal computers to mobile devices, has been gradually changing the landscape of technology-transformed human learning and development all over the world (Hwang and Wu, 2014). This hands-on practice facilitates the incorporation of one-to-one computing into all fields of education. Moreover, the various kinds of mobile learning with and without context-aware computing and sensors open up tremendous possibilities for the design and enactment of innovative learning and instructional models, and even the enhancement of pre-existing prototypes, such as perpetual and ubiquitous learning, autonomous and personalised learning, authentic and contextualised learning, seamless and synchronous learning, as well as rapid knowledge co-construction with peers, among many others (Liu et al., 2016a).

This promising learning trend leads to the further empowerment of the learners in deciding what, where, when, and how they would develop the target knowledge and skills, and with/from whom they would advance them. With the initial hype, however, there have been various voices within the researchers' community to call for more practitioners and investigators to re-define, re-design, re-implement, and even re-assess the notion of one-to-one computing in classroom and informal learning, such as whether one-to-one settings may impact on peer collaboration and teachers' roles, the issues of student and social readiness, as well as the explorations of alternatives or hybrid settings of many-to-one, one-to-many, many-to-many, and one-to-one configurations and explorations. The guest editors of this special issue have responded to the ever-changing mobile learning tendency, and have selected five representative academic works from different places in the world.

Making good use of mobile learning with appropriate devices will increase the learning motivations of the students and then help them bring about positive performance (Hsu, 2015; Liu et al., 2016b). One article of this special issue entitled "Effectiveness of mobile learning application in improving reading skills in Chinese language and towards post-attitudes' has showed that the students had more interests and motivation in learning Chinese reading skills with the use of smartphone applications in comparison with those who adopted traditional method in the classroom. In addition to the language learning field, mobile learning with linguistic developments and strategies has been widely introduced into different academic and educational fields and places to go with the modern socio-cultural theoretical perspective, such as museums (Wang et al., 2017). One of the attractive values is to help users achieve personalised learning with the individual path. Considering personalised characteristics into particular learning subjects designed on the mobile device may offer students adaptive learning opportunities or personalised supports anytime and anywhere. A previous study has employed the English proficiency level and the preferences of the students into developing a mobile application recommending them personalised reading material (Hsu et al., 2013). In the article of this special issue entitled 'Effect of an adaptive career-consultation mobile application on students' competency development', a mobile application has been developed based on the capabilities and interests of the students in order for them to gain the adaptive career consultation via mobile devices. More other personalised characteristics, such as human character, knowledge behaviours, and skills, are encouraged to be taken into account with the use of appropriate mobile products in the future.

Similarly, another popular mobile learning trend is for instructors and researchers to integrate game-based learning with mobile and portable devices for various purposes. In the special issue, in an article entitled 'The influence of thinking styles and self-adjustment strategies applied to a digital table game', people will notice that integrating a board game with context-aware QR-Codes could successfully extend the concept from the traditional board game through the new application of a mobile device. In the future, the designers of board games could also consider Augmented Reality (AR; Hsu, 2017) or search engine tools or other techniques (Chien et al., 2016) and personalised human factors into consideration for various types of mobile learning. With these popular and widely-used features, personalised characteristics, game-based learning, and mobile learning together have become more important and meaningful than before in various academic settings and industrial domains.

Meanwhile, with the popular use of portable devices worldwide, many parents have also worried about their children who may be addicting to 3C usage, especially the tablet PC or smart phones, without paying any attention to the educational application and value of the mobile device. One article of this issue entitled 'Mobile educational applications for children. What educators and parents need to know?' has noted that the educators and parents need to re-consider and re-evaluate which application on the smartphone is helpful to their children and for which purposes in order to better assist their children in making good use of the selected 3C products with an identified value. Hence, this significant issue is worth our close attention when choosing an appropriate mobile application to meet the learning need.

Alternatively, in order to put an emphasis on mobile learning from the viewpoints of engineers, another article entitled 'Proposing a new requirements engineering framework for m-learning applications' has provided a novel engineering framework for the applications of mobile learning from the perspectives of developers and designers in the industry. Interested readers will find it innovative and learn from different visions and strategies about the use of mobile device for engineering-based learning on the go.

We hope you will enjoy reading these five meaningful and interesting articles about mobile learning applications and strategies from various excellent scholars.

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